EXHIBIT D

Explanatory memorandum on pension reform

August 4,2017

The new Pension system

- Fund pension obligations on a “pay go” basis
- Switch from Defined Benefit plan to Defined Contribution plan
- Enroll employees in Social Security

Plan for Pension Reform

The government of Puerto Rico operates three public employee retirement systems in Puerto Rico: the Employees Retirement System (ERS), Teachers Retirement System (TRS), and Judicial Retirement System (JRS). Exhibit 1 provides some basic information on the plans.

Exhibit 1: Overview of Puerto Rico Retirement Systems

Plan	ERS	TRS	JRS	Total
Active Employees	120,000	38,000	370	**158,000**
Retirees and Beneficiaries	125,000	42,000	470	**168,000**
Total Covered	245,000	80,000	840	**325,000**
Annual Benefits	$1.7 Billion	$800 Million	$25 Million	**$2.5 Billion**
Total Actuarial Liability	$38 Billion	$17 Billion	$600 Million	**$55 Billion**
Data as of:	*July 1, 2015*	*July 1, 2014*	*July 1, 2014*	

The plans have different tiers of benefit formulas, some of which are traditional defined benefit pensions based upon years of service and final salary, while others are hybrid cash balance plans. Under the hybrid cash balance plans, employees have notional accounts that are credited with contributions and interest, and upon retirement, benefits are payable as an annuity. Different benefit tiers apply to employees based upon the year in which they were hired.

All employees make contributions toward their benefits, albeit at different rates. Most regular government employees also participate in Social Security, which includes both employer and employee contributions, while most teachers, judges, and police officers do not. Exhibit 2 illustrates various groups and their retirement coverage.

Exhibit 2: Description of Pension Groups and Retirement Coverage

Group	Defined Benefit Component	Hybrid Cash Balance Component	Social Security Coverage
ERS – Hired Jan 1, 2000 or later	None	Based on employee contribution and a share of investment earnings	Police – No Others – Yes
ERS – Hired before 2000	Based on years of service and salary, frozen as of 2013	Based on employee contribution since 2013 and a share of investment earnings	Police – No Others – Yes
TRS – Hired Aug 1, 2014 or later	None	Based on employee contribution and a share of investment earnings	No
TRS – Hired before Aug, 2014	Based on salary and years of service	None	No
JRS – Hired July 1, 2014 or later	None	Based on employee contribution and a share of investment earnings	No
JRS – Hired before July 1, 2014	Based on salary and years of service	None	No

Over many decades, successive governments have failed to adequately fund these retirement plans and today the ERS, TRS and JRS are nearly insolvent. These retirement plans will soon deplete the assets they use to pay benefits. Without action, this could lead to large benefit cuts for all retirees. Such benefit cuts would not only be devastating to current retirees and their families, but would adversely impact Puerto Rico's economy as retirees spend virtually all their income on the island. The Board acknowledges its duty under PROMESA to provide adequate funding for pension systems, such that the retirement systems promise benefits they can afford and that the government funds the benefits promised by the retirement systems. The Board believes that it is essential to reform Puerto Rico's retirement systems to reduce costs, restore the plans to financial sustainability, and maintain responsible benefit levels for current and future retirees. While benefit reductions are necessary to restore fiscal balance, they should be structured to protect lower income retirees, who otherwise could become impoverished and therefore forced to rely upon government "safety net" benefits rather than benefit from the contributions they made into pension systems throughout their careers.

The following actions are essential to reducing and controlling the amounts owed to current and future retirees, while maintaining essential income to retirees:

- Reduce total annual pension benefit payments by an average of 10 percent. Reductions should be implemented progressively to protect lower-income retirees from poverty, thereby requiring larger reductions from retirees with the highest benefits. As shown in Exhibit 3, under the formula outlined by the Board, 25% of retirees will experience no reductions and the median retiree will receive less than a 10% reduction.
- Shift all three retirement plans to pay-as-you go ("paygo") funding, under which the government will directly pay pension benefits as they are due rather than attempt to build up assets to pre-fund future benefits. Paygo funding allows the retirement systems to continue to pay benefits even after the plans' assets have been exhausted. Current employees who are enrolled in the TRS and JRS defined benefit (DB) plans, along with ERS employees, will no longer accrue future benefits under those plans. All ERS, TRS, and JRS plan participants will earn future benefits only under the new defined contribution (DC) retirement plan as described below.
- Employees in the defined benefit and hybrid retirement plans will cease to accrue new benefits under those plans, as described above. For all future service, employees will participate in true defined contribution accounts funded by employee contributions. These accounts will be managed and invested separately from the government plans and each account will be the property of its owner. These steps help ensure that employees' contributions are saved to pay for their future retirement benefits.

Shift to Pay-as-you-go Financing

The ERS, TRS and JRS plans are on the brink of insolvency because governments over many years have consistently failed to make sufficient contributions. As early as 1970, actuaries warned that the government was contributing far less than was necessary to make the retirement systems financially sustainable for the future. In a 1988 analysis, actuaries warned that unless contributions were increased, the Employees Retirement System would run out of money around 2012. While pension reforms have been attempted, it is clear that changes did not go far enough.

More recently, instead of depositing employee contributions to System 2000 accounts to fund future benefits, the plans have diverted employee contributions to pay benefits for current retirees. The shift to pay-as-you-go financing will require the government to fund current retirees' benefits, allowing employees' contributions to be saved in defined contribution accounts to fund their future retirement benefits (as they should have been all along.)

ERS, TRS, and JRS plan assets will soon be exhausted. To maintain benefit payments, the plans will convert to pay-as-you-go financing whereby the government will make benefit payments directly out of the current budget. All government agencies (including the central government), participating public corporations, and municipalities, will pay into the government Treasury Single Account (TSA) the amounts necessary for the monthly pension payments for each of their retirees and beneficiaries.

Hybrid plan benefits are based on investment return of the fund. Because of the exhaustion of assets, there will no measurable investment return. Returns on hybrid accounts will be based on a government bond yield.

Freezing Benefit Accruals under TRS and JRS

TRS members hired prior to August 1, 2014 and JRS members hired prior to July 1, 2014 are currently accruing benefits under their defined benefit retirement plans. ERS members have already transitioned to hybrid cash balance plans. To avoid creating future pension liabilities and to stabilize the system for the benefit of both taxpayers and future retirees, the plans are to be frozen as quickly as possible. Members will retain the benefits they accrued to date, subject to the benefit reduction formula discussed below. Future benefits will be based on contributions and earnings in new defined contribution retirement accounts. This will result in consistent treatment between ERS, TRS, and JRS, where employees will contribute to segregated DC accounts rather than notional accounts. Going forward, employees will have the certainty that their contributions and investment returns will be safeguarded for the future, ensuring necessary retirement security.

The New Defined Contribution Plan

Some Commonwealth employees covered by the TRS and JRS plans participate in a traditional DB pension, which pays a fixed amount based upon the employees' final earnings and years of service. Other Commonwealth employees (mostly in ERS, but including some recently hired teachers and judges) participate in a hybrid "cash balance" plan, in which amounts equal to their contributions are credited to a notional account. However, hybrid cash balance plan participants do not receive the full investment returns on their hybrid account balances and there is no separate account in which their contributions are segregated.

Going forward, all Commonwealth employees will participate in true defined contribution (DC) retirement accounts. The most common type of retirement plan today is also a DC plan – the 401(k).

The Commonwealth will incur no future unfunded liability to members under the DC plan, since the plan will be funded only with employee contributions with no investment return guarantees. The DC plan will be professionally managed and invested separately from the existing systems, so that employees can be confident that their contributions are being saved for their future retirement benefits. Each employees' contributions to the DC plan will be separately invested and managed, being merged neither with funds from the legacy ERS, TRS, and JRS systems, nor with the funds of other DC participants. The DC plan will be designed to keep administrative costs to a minimum while providing employees with a reasonable choice of simple investment options. Large employer plans, including the Federal Thrift Savings Plan, are models of this approach.

Social Security Participation

Currently, teachers, police officers, and judges do not participate in Social Security. They do not pay into the program, nor does the government make a Social Security contribution on their behalf. Teachers, police officers and judges are also not eligible for benefits at retirement. Unlike other ERS members, teachers, police officers, and judges are entirely reliant on their government pensions for income in retirement. This places them at particular risk when government retirement plans are poorly funded.

The Board intends that all future employees will participate in Social Security. Social Security will provide employees with diversified sources of income in retirement, and Social Security's progressive benefit formula will provide a stronger safety net for lower-paid employees. However, Social Security requires a 6.2% contribution of pay by both the employer and the employee. In exchange, a typical full-career government employee retiring with a salary of $35,000 will be entitled to a Social Security benefit of $16,000, on addition to the benefit the employee builds in their defined contribution retirement account.

Because newly-hired government employees will contribute to Social Security and receive benefits from it, a lower required contribution rate to the defined contribution retirement plan may be appropriate for newly-hired government employees. Also to be considered is whether to expand Social Security participation for younger workers who are already employed by the government. Social Security participation by current government employees may require a referendum vote by those impacted.

10 Percent Reduction in Total Benefit Payments

Expenditures are being reduced throughout the Commonwealth's budget and holders of government bonds are not likely to be repaid in full. Retirement plan participants, like other unsecured creditors, will have a reduction in the amounts paid to them by the Commonwealth.

This reduction will average 10% for the entire group of retirement system members. Benefit reductions will begin 90 days following confirmation of the Plan of Adjustment under Title III of PROMESA. Although the average benefit reduction will be 10%, reductions will be implemented progressively so that there is no reduction for those with combined retirement plan and Social Security benefits below the poverty level of $1,000 per month.

Actuaries for the Board and the Government have calculated that the following approach will result in reductions averaging 10%:

- Determine the average monthly pension by adding the regular monthly pension amount, the special law pension, the healthcare bonus, and one-twelfth of the Christmas Bonus and Medicine Bonus;
- Reduce these monthly benefits by 25%; and
- Add back up to $150 per month ($250 per month for those who are not covered by Social Security) to reduce the effect of benefit reductions for those with the lowest benefits.

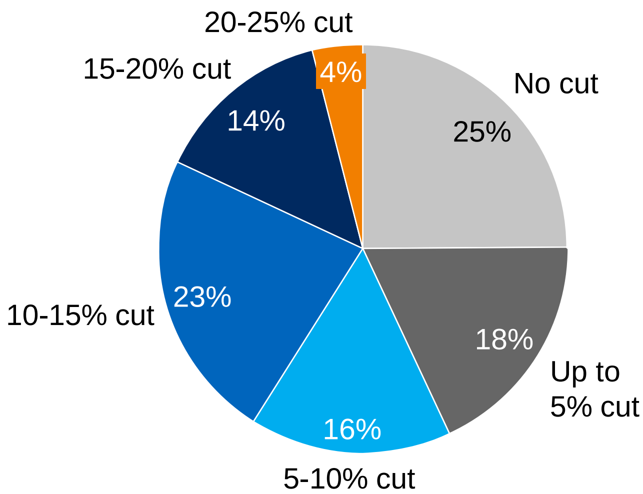
This formula is equivalent to giving each beneficiary a reduction of 25% in the monthly benefits they receive in excess of $600, for retirees who also receive Social Security, and $1,000 for those without Social Security. These dollar figures will be adjusted in future years consistent with increases in the Federal poverty threshold.

Under this approach, about 25% of current retirees would receive no reduction in their benefits, and an additional 18% of retirees would receive benefit reductions of less than 5%. Very few retirees will have more than a 20% reduction, and none will have a reduction of 25% or more. The distribution of retiree benefit reductions is illustrated in Exhibit 3.

Exhibit 3: Distribution of Benefit Reductions

Distribution of Benefit Reduction

% of retirees



- **43% of retirees** will experience a benefit **reduction of 5% or less**
- **~60% of retirees** will experience a benefit **reduction of 10% or less**
- **Over 80% of retirees** will experience a benefit **reduction of 15% or less**

The following examples illustrate how the benefit reductions will work for seven hypothetical retirees.

- **Ana** is a retired teacher with a total monthly TRS benefit of $875. She also receives $300 per year as a $200 Christmas Bonus plus a $100 Medicine Bonus. Ana does not participate in the healthcare program. $300 per year equates to $25 per month. This means that her average monthly pension for purposes of this calculation is $875 + $25 = $900.

  A 25% reduction of $900 is $225. The "add-back" is up to $250, meaning that a $225 "add-back" fully restores her pension and she will not have any reduction in her monthly benefits.

- **Blanca** is retired under ERS with a monthly benefit of $575. She also receives Social Security, $100 per month for retiree healthcare, as well as Christmas and Medicine Bonus which equate to $25 per month. Her monthly pension for purposes of this calculation is $575 + $100 + $25 = $700.

  A 25% reduction of $700 is $175. The "add-back" is $150 because she is receiving a Social Security benefit. This means that her reduction is $175 minus $150 or $25 per month. This represents a 4% reduction in Bianca's $700 benefit.

- **Carlos** is retired under ERS with a monthly benefit of $775. He also receives Social Security, $100 per month for retiree healthcare, as well as a Christmas and Medicine Bonus. His monthly pension for purposes of this calculation is $775 + $100 + $25 = $900.

  A 25% reduction of $900 is $225. The "add-back" is $150 because he is receiving a Social Security benefit. This means that his reduction is $225 minus $150 or $75 per month. This represents an 8% reduction in Carlos' $900 benefit.

- **Diego** is a retired police officer under ERS with a monthly benefit of $1,775. He also receives a Christmas and Medicine Bonus. Diego did not elect retiree healthcare coverage. His monthly pension for purposes of this calculation is $1,775 + $25 = $1,800.

  A 25% reduction of $1,800 is $450. The "add-back" is $250 because he is not receiving a Social Security benefit. This means that his reduction is $450 minus $250 or $200 per month. This represents an 11% reduction in Diego's $1,800 benefit.

- **Eva** is retired under ERS with a monthly benefit of $1,475. She also receives Social Security, $100 per month for retiree healthcare, as well as Christmas and Medicine Bonus. Her monthly pension for purposes of this calculation is $1,475 + $100 + $25 = $1,600.

  A 25% reduction of $1,600 is $400. The "add-back" is $150 because she is receiving a Social Security benefit. This means that her reduction is $400 minus $150 or $250 per month. This represents a 16% reduction in Eva's $1,600 benefit.

- **Felix** is a retired judge under JRS with a monthly benefit of $5,033. He also receives $100 per month for retiree healthcare, as well as a Christmas, Summer, and Medicine Bonus which total $800 per year. His monthly pension for purposes of this calculation is $5,033 + $100 + $800/12 = $5,200.

  A 25% reduction of $5,200 is $1,300. The "add-back" is $250 because he is not receiving a Social Security benefit. This means that his reduction is $1,300 minus $250 or $1,050 per month. This represents a 20% reduction in Felix's $5,200 benefit.

- **Gilberto** is retired under ERS with a monthly benefit of $575. He also receives Social Security, as well as a Christmas and Medicine Bonus. He did not elect retiree healthcare coverage. His monthly pension for purposes of this calculation is $575 + $25 = $600.

  A 25% reduction of $600 is $150. The "add-back" is $150 because he is receiving a Social Security benefit. This means that his "add-back" fully restores his pension and he will not have any reduction.

These examples are summarized in Exhibit 4.

Exhibit 4: Examples of Benefit Reduction Calculations

Example Name	Ana	Blanca	Carlos	Diego	Eva	Felix	Gilberto
Retirement System	TRS	ERS	ERS	ERS – Police	ERS	JRS	ERS
Social Security	No	Yes	Yes	No	Yes	No	Yes
Monthly Base Pension	$875	$575	$775	$1,775	$1,475	$5,033	$575
Retiree Healthcare	$0	$100	$100	$0	$100	$100	$0
Christmas/Medicine Bonus	$25	$25	$25	$25	$25	$67	$25
Total Pension Value	**$900**	**$700**	**$900**	**$1,800**	**$1,600**	**$5,200**	**$600**
25% Reduction	$225	$175	$225	$450	$400	$1,300	$150
Add-Back	$225	$150	$150	$250	$150	$250	$150
Net Reduction	**$0**	**$25**	**$75**	**$200**	**$250**	**$1,050**	**$0**
Percent Reduction	**0%**	**4%**	**8%**	**11%**	**16%**	**20%**	**0%**

Other features of 10% reduction

Some individuals currently retired and those retiring in the future will receive at least part of their benefit based upon participation in the cash balance accounts. For purposes of the reduction calculations, only the amounts attributable to benefits accrued as of the PROMESA effective date of June 30, 2016 will be considered. The pension attributable to contributions after this date and before true defined contribution accounts are established will not be subject to any reduction. Contributions made to true defined contribution accounts will be in separate, individually-owned accounts and are protected from reduction.

The “add-back” for those covered by Social Security is $150 rather than $250 because these retirees also receive Social Security benefits partially financed by the employers. The combination of Social Security and system benefits will likely keep them above the poverty levels. In the unlikely event it does not, there may be a provision where the retirees can provide proof that the cuts drop their total benefits below the $1,000 per month poverty level and an adjustment will be made. For example, if Blanca in the example above does not have monthly Social Security benefits of at least $300, then her $25 reduction would be restored.

The Board anticipates that the reductions will come first from the Medicine and Christmas Bonuses, then from the retiree healthcare allowance, then from any other special law benefits.

For example, Eva's $250 reduction would take the form of a cessation of the Christmas and Medicine bonuses which equate to $25 per month, plus elimination of $100 monthly retiree healthcare plus a reduction of $125 in her $1,475 monthly pension.

The Board finds that a 10% average reduction in pensions is appropriate and necessary. The goal is a balanced approach to restore fiscal balance to Puerto Rico while ensuring that cuts to retirement benefits occur in a progressive matter and spare the lowest-income individuals. The level of cuts to pension benefits is far lower than the level of reduction in debt payments, government spending, or health care assumed in the fiscal plan. The Board is open to considering other approaches that achieve a 10% reduction and may be preferable to those outlined above.